TESTIMONY OF KING MILLING,

CHAIRMAN, GOVERNOR'S ADVISORY COMMISSION ON COASTAL

RESTORATION AND CONSERVATION

TO

HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE,

SUBCOMMITTEE ON WATER RESOURCES AND THE ENVIRONMENT,

THE LOUISIANA STATE SENATE ENVIRONMENT

July 15, 2004

I am King Milling, Chairman, Governor's Advisory Commission on Coastal Restoration and Conservation.

I appreciate the opportunity to address the committee on the issue of Louisiana's deteriorating coastal ecosystem. If I can leave you with one paramount thought today, it would be the recognition that this deteriorating condition must be addressed aggressively and with an unwavering sense of urgency. The consequences which will flow from a failure to act timely and in a meaningful fashion will be felt not only by hundreds of thousands of citizens in Louisiana and those living and working in the immediate region but by the country as a whole.

One might reasonably ask, "What facts support such a declaration?" Unfortunately, the facts speak for themselves.

Louisiana's 400 mile coastline is the largest expanse of coastal wetlands in America comprising 30% of the nation's coastal marsh. It was created over thousands of years from accumulations of sediment, nutrients and fresh water derived from flooding of the Mississippi River. This extraordinary ecosystem, the seventh largest deltaic system on earth, has provided a natural buffer against tropical storms and hurricanes. It is considered the richest and most productive estuary in the United States. It is disappearing at an alarming rate. (Attached as Exhibit A is a map of South Louisiana, prepared by U.S.G.S. depicting the land loss from 1930 through 2050.)

From 1930 to 2000, Louisiana has lost in excess of 1,900 square miles (1,236,000 acres). It is projected that by 2050 Louisiana shall lose an additional 700 square miles. In the 1990's alone, approximately ninety percent of the nation's coastal land loss occurred in Louisiana. Each year, we lose approximately 24 square miles.

This coastal land loss is largely attributable to human intervention undertaken by the federal government to achieve worthy objectives of sustaining navigation and flood protection. However, in the case of South Louisiana the intervention achieved unintended consequences. As a result of levees built along the banks of the Mississippi River, the massive sedimentary load, which historically created and nourished the delta, is being channeled into the depths of the Gulf of Mexico. In short, with the construction of the levee system the natural process of building the delta ceased and what remains of a once vital ecosystem of marsh and swamp is dying for a lack of rejuvenating substances.

If this problem is not addressed in the near future, the seventh largest deltaic system on earth will literally implode. The delta as we know it will be lost and the existing shoreline will become a part of the Gulf of Mexico. In some critical areas, the shoreline will advance inland by up to 33 miles. The impact of that change may not be intuitively obvious until one recognizes that for approximately every 2.7 miles of loss of marsh or swamp, there is a corresponding increase of one foot of storm surge.

The very existence of this massive ecosystem has protected those who over centuries live and work in Louisiana from the ravages of the Gulf of Mexico. These wetlands provided a natural barrier against storms and hurricanes. Historical storm surges pushed by approaching hurricanes reached levels of 10 to 12 feet and spread inland as much as 25 miles. Without that buffer, it is estimated that surges created by a category 3 storm will increase to heights estimated to be between 16 and 22 feet. It is equally clear that if the deterioration continues as expected, smaller storms will begin to inflict disproportionately greater damage in the future.

The obvious consequence shall be the vulnerability of New Orleans itself; as historically important and as strategically situated as any city in the country. But this is about more than just a metropolitan area located on the banks of the Mississippi. It is about the very survival of towns and communities across the entire expanse of Louisiana's coast. For example, it is estimated that in the eleven parishes within the Barataria/Terrebonne Estuary System (a broad estuary system located south and southwest of New Orleans) there are 220,000 housing units, 180,000 commercial establishments, 200 public schools, 7,000 miles of road, 300 oil and gas fields with over 18,000 wells, 5 major refineries, 22 gas processing plants, and more than 30 public water utilities. Almost every house and building is built on land at or near sea level. Few, if any, structures shall be capable of withstanding the impact of storm surges and hurricanes of the future.

Thus, a complex culture created by the amalgamation of Creoles, Cajuns, African-Americans, French, Spanish, Native Americans, Italians, and others living and working along this fragile coastline will be impacted in ways one hardly wants to imagine. Clearly, unless we address the problem head on, the threat of massive dislocation, property damage, loss of insurability and even loss of life itself is a realistic expectation for our future.

But this is about more than just a question of loss of homes, lives, culture and livelihood (not to mention an area of land greater in size than the State of Delaware).

From an environmental standpoint the loss of the Mississippi deltaic plain would be an international disaster. It would devastate migrating patterns along the Mississippi flyway, as well as countless species of fish, birds and animals whose survival is dependent upon its existence. As it is the most productive ecosystem in the United States, it is critical to breeding, spawning, foraging and nursery for a variety of fish and shell fish. It is estimated that over 75% of Louisiana's commercially harvested fish and shell fish are dependent at some stage in their lifecycle on these wetlands and 98% of offshore Gulf of Mexico commercial species population are dependent upon Louisiana's estuary.

Moreover, this continued deterioration will have a ripple effect throughout the country. Louisiana is an important contributor to the nation's domestic fish

and shellfish production. It is the largest producer of shrimp, blue crab, oysters and menhaden in the country. 30% by weight of commercial fishing harvested in the lower 48 states is from Louisiana. The linkage among this deteriorating ecosystem, diminishing production over time, limited domestic availability and higher prices is self evident. If this ecosystem, the primary breeding, spawning and nursery for commercial fish in Louisiana and the Gulf of Mexico is lost, the nation as a whole will feel the pain.

As this ecosystem goes, it is inevitable that the production, prices and delivery of oil and natural gas will be negatively impacted. There is produced from and/or transported through Louisiana's fragile ecosystem approximately 30% of every MCF of gas and barrel of oil delivered into the continental United States. Louisiana is the number one producer of oil and the number two producer of natural gas.

The delivery of that product is dependent upon the capacity of infrastructure to withstand the natural elements. There are thousands of miles of pipeline in coastal Louisiana which are critical to orderly transportation of oil and gas and their by-products ranging in size from small gathering and feeding lines to large diameter systems. There are also thousands of oil wells, platforms, storage tanks, and compressor systems, which are integral to delivery throughout the country. For the most part, each mile of pipe and each interdependent facility were not designed to accept the increased winds and wave action experienced in open bays or the Gulf itself. Each was built with an inherent

appreciation of the protection afforded by Louisiana's ecosystem. As it is lost, critical systems will break under new and unanticipated stress, pipelines will rupture, cathodic protective systems will fail and the delivery of products will be jeopardized. Cost will increase nationwide.

Continued coastal erosion will adversely affect marine transportation within Louisiana resulting in increased costs of product delivery, increased transportation costs and significant increases in federally funded dredging and maintenance costs. South Louisiana has two major waterway systems used to transport hundreds of millions of tons of commerce, north-south along the Mississippi River basin and east-west along the Gulf Intercoastal Waterway System (GIWW). Five of the 16 largest ports by tonnage in the United States are located along these two interlocking systems. The ports of South Louisiana handle approximately 14% of all U.S. oil imports and 57% of all grain exports. While the ports on the Mississippi largely link Louisiana with the rest of the country to the north, the GIWW is a critical link in the shallow draft transportation system which affords relatively inexpensive commodity and bulk transportation alternatives east and west along the Gulf of Mexico.

The effects of coastal erosion on transportation costs and timely delivery of product will be felt by the country. The GIWW traffic and mode of transportation has been protected from wind, weather and waves from the Gulf by the coastal marshland. As erosion occurs, the buffers are lost, siltation increases, and navigation and maintenance will become more difficult and

expensive. Coastal erosion will also increase the threat of closure of the Mississippi River from siltation. It is not inconceivable that our levee system will become effectively a barrier between the gulf and the river itself.

One could extrapolate other impacts which would have national implication but suffice to say that all of these very real impacts of coastal erosion in Louisiana set out above are critical to the decision made by this country concerning Louisiana's deteriorating coastline.

They also speak volumes for the need to address these critical problems aggressively and with a sense of urgency. It is a hackneyed phrase indeed but applicable in this case that "the clock is ticking." Unless we address this issue with a full understanding and appreciation of the impact of coastal erosion upon Louisiana and the nation, we cannot and will not achieve the commitment required nor the sense urgency.

As the Chairman of the Governor's Advisory Commission on Coastal Restoration I have witnessed an extraordinary commitment from professions which are historically adversarial. Environmental interests represented by Environmental Defense Fund, National Wildlife Federation, the National Audubon Society, the Nature Conservancy and the Coalition To Restore Coastal Louisiana have joined hands and are working with fishing interests, oil and gas interests, property owners and others with the single thought that we must collectively solve the problem of Louisiana's coastal deterioration, or, we will collectively fail.

Only a matter of such substance and seriousness would trigger such consistency in thought and action. We speak with one voice, not just for Louisiana but for the nation. We must develop a comprehensive solution and it must be implemented with a sense of urgency. It will be founded on best science and engineering and it will be complex and expensive, but it must be done. For everyone involved, there is no choice.

The State of Louisiana and the Corp. of Engineers have prepared a plan of action to address this critical problem. It is imperative that we move forward with authorizing the plan with the full recognition that it is an initial step towards the reestablishing of a sustainable ecosystem. Time is of the essence and so we must commence the implementation now.

Respectfully submitted,

R. King Milling